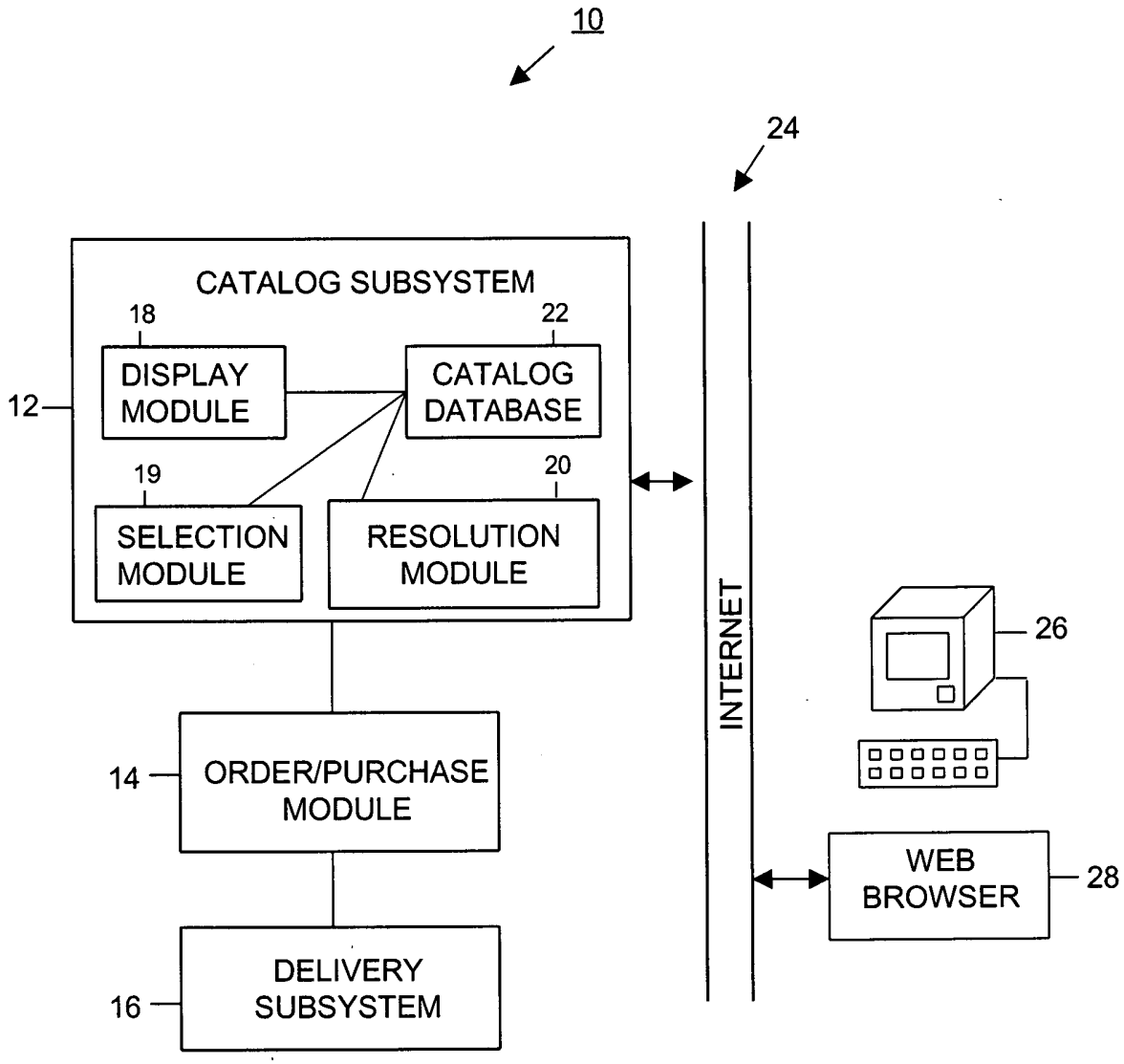

10
24
CATALOG SUBSYSTEM
18
22
DISPLAY MODULE
CATALOG DATABASE
12
19
20
SELECTION MODULE
RESOLUTION MODULE
INTERNET
26
14
ORDER/PURCHASE MODULE
WEB BROWSER
28
16
DELIVERY SUBSYSTEM

FIG. 1

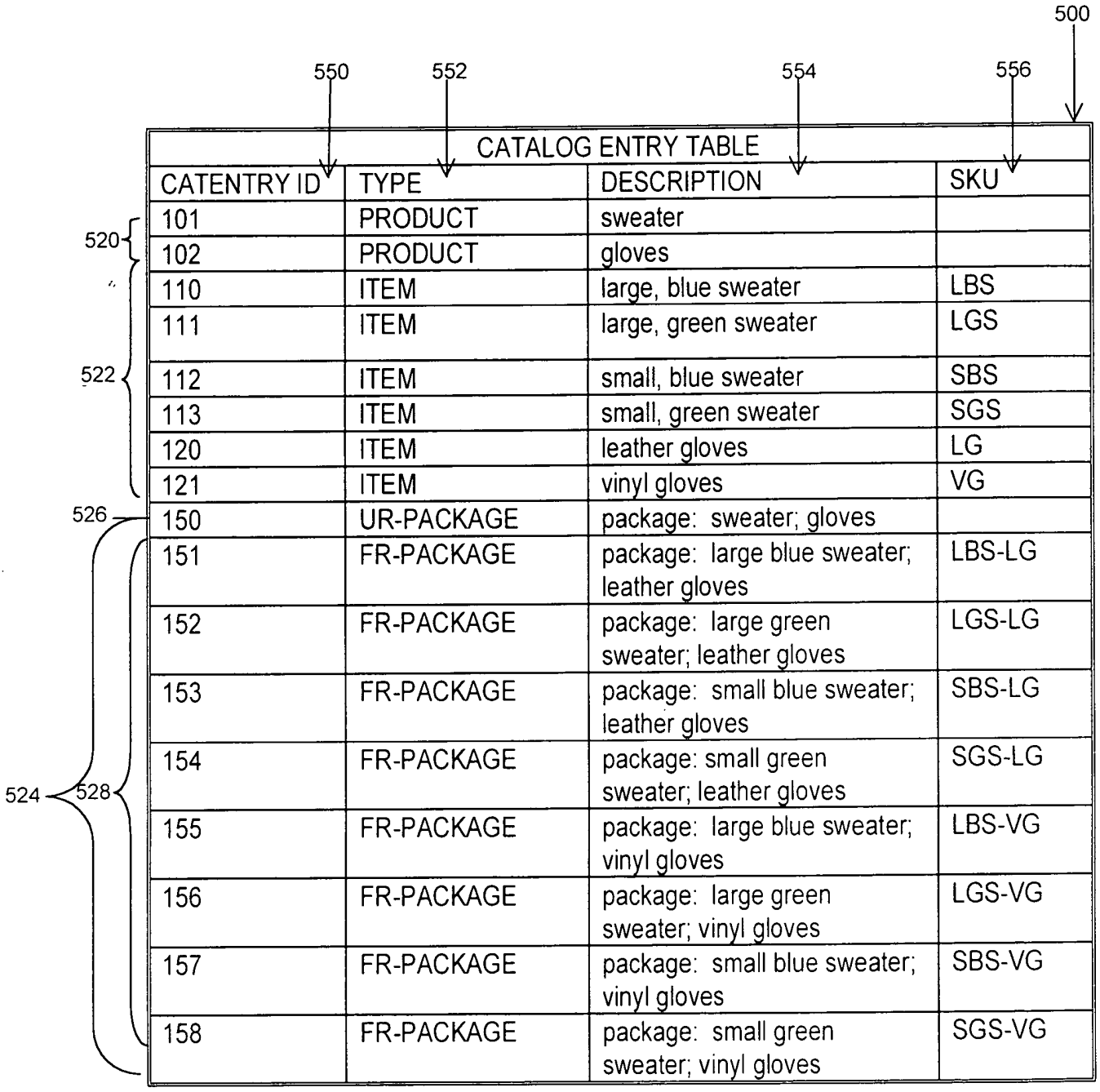
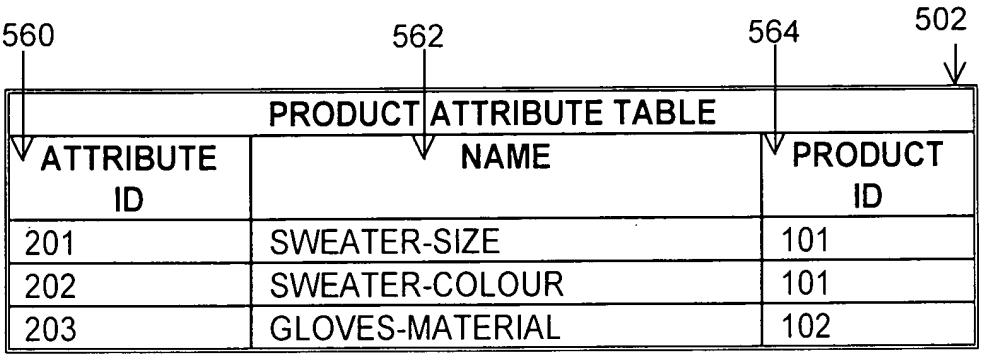
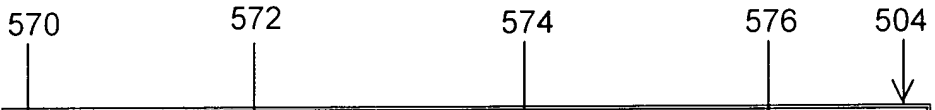

500
550
552
554
556
CATALOG ENTRY TABLE
CATENTRY ID
TYPE
DESCRIPTION
SKU
101 PRODUCT sweater
102 PRODUCT gloves
110 ITEM large, blue sweater LBS
111 ITEM large, green sweater LGS
112 ITEM small, blue sweater SBS
113 ITEM small, green sweater SGS
120 ITEM leather gloves LG
121 ITEM vinyl gloves VG
150 UR-PACKAGE package: sweater; gloves
151 FR-PACKAGE package: large blue sweater; leather gloves LBS-LG
152 FR-PACKAGE package: large green sweater; leather gloves LGS-LG
153 FR-PACKAGE package: small blue sweater; leather gloves SBS-LG
154 FR-PACKAGE package: small green sweater; leather gloves SGS-LG
155 FR-PACKAGE package: large blue sweater; vinyl gloves LBS-VG
156 FR-PACKAGE package: large green sweater; vinyl gloves LGS-VG
157 FR-PACKAGE package: small blue sweater; vinyl gloves SBS-VG
158 FR-PACKAGE package: small green sweater; vinyl gloves SGS-VG
520
522
524
526
528

FIG. 2A



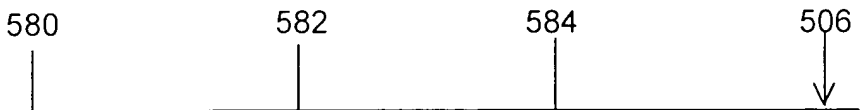
PRODUCT ATTRIBUTE TABLE		
ATTRIBUTE ID	NAME	PRODUCT ID
201	SWEATER-SIZE	101
202	SWEATER-COLOUR	101
203	GLOVES-MATERIAL	102

Fig. 2B



PRODUCT ATTRIBUTE VALUE TABLE			
ATTRIBUTE VALUE ID	ATTRIBUTE ID	VALUE	ITEM ID
301	201	SMALL	112
302	201	LARGE	110
303	201	SMALL	113
304	201	LARGE	111
305	202	BLUE	112
306	202	GREEN	111
307	202	BLUE	110
308	202	GREEN	113
309	203	VINYL	121
310	203	LEATHER	120

Fig. 2C



PACKAGE ATTRIBUTE TABLE		
PACKAGE ATTRIBUTE ID	ATTRIBUTE ID	UR-PACKAGE ID
401	201	150
402	202	150
403	203	150

Fig. 2D

590 592 594 508

PACKAGE ATTRIBUTE VALUE TABLE		
PACKAGE ATTRIBUTE ID	ATTRIBUTE VALUE ID	FR-PACKAGE ID
401	301	153
401	302	151
401	303	154
401	304	152
401	301	157
401	302	155
401	303	158
401	304	156
402	305	153
402	306	152
402	307	151
402	308	154
402	305	157
402	306	156
402	307	155
402	308	158
403	309	155
403	310	151
403	309	156
403	310	152
403	309	157
403	310	153
403	309	158
403	310	154

FIG. 2E

600 602 604 510

PACKAGE RELATIONSHIP TABLE		
PACKAGE ID	COMPONENT ID	TYPE
150	101	UR-PackageRel
150	102	UR-PackageRel
151	110	FR-PackageRel
151	120	FR-Package Rel
152	111	FR-PackageRel
152	120	FR-PackageRel
153	112	FR-PackageRel
153	120	FR-PackageRel
154	113	FR-PackageRel
154	120	FR-PackageRel
155	110	FR-PackageRel
155	121	FR-PackageRel
156	111	FR-PackageRel
156	121	FR-PackageRel
157	112	FR-PackageRel
157	121	FR-PackageRel
158	113	FR-PackageRel
158	121	FR-PackageRel

FIG. 2F

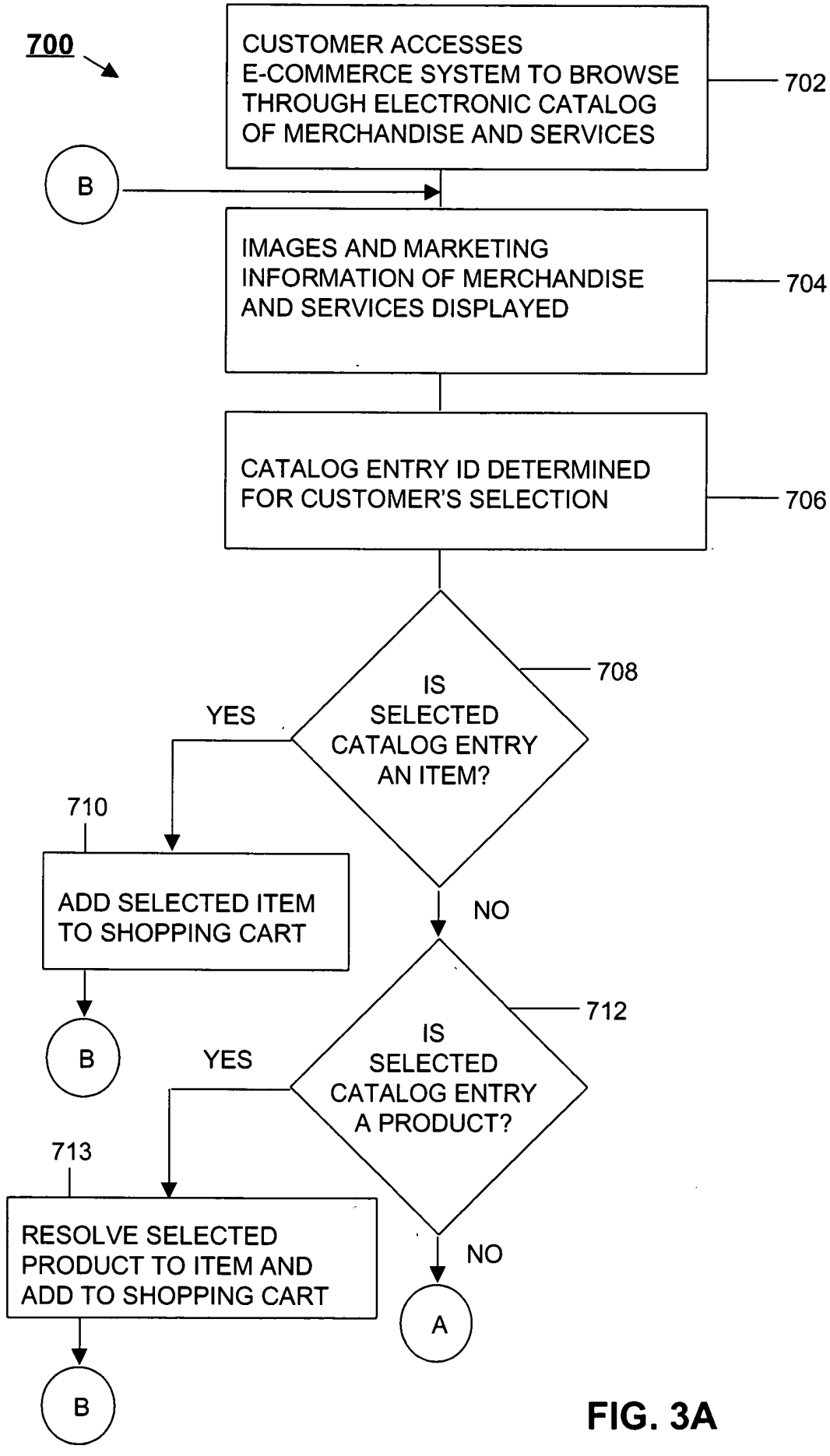

700
CUSTOMER ACCESSES E-COMMERCE SYSTEM TO BROWSE THROUGH ELECTRONIC CATALOG OF MERCHANDISE AND SERVICES
702
B
IMAGES AND MARKETING INFORMATION OF MERCHANDISE AND SERVICES DISPLAYED
704
CATALOG ENTRY ID DETERMINED FOR CUSTOMER'S SELECTION
706
IS SELECTED CATALOG ENTRY AN ITEM?
708
YES
710
ADD SELECTED ITEM TO SHOPPING CART
B
NO
IS SELECTED CATALOG ENTRY A PRODUCT?
712
YES
713
RESOLVE SELECTED PRODUCT TO ITEM AND ADD TO SHOPPING CART
B
NO
A

FIG. 3A

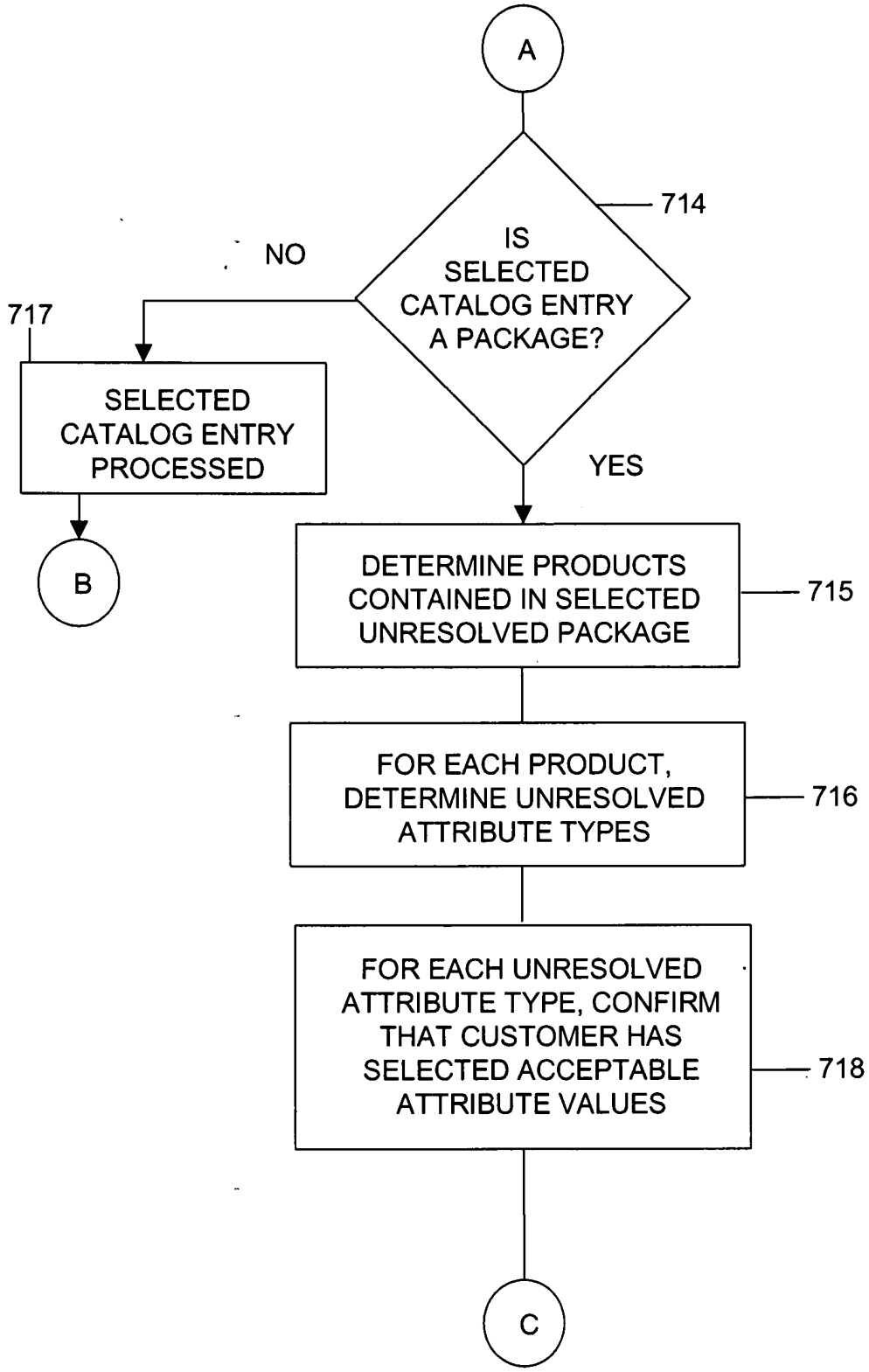

A
IS SELECTED CATALOG ENTRY A PACKAGE?
714
NO
717
SELECTED CATALOG ENTRY PROCESSED
B
YES
DETERMINE PRODUCTS CONTAINED IN SELECTED UNRESOLVED PACKAGE
715
FOR EACH PRODUCT, DETERMINE UNRESOLVED ATTRIBUTE TYPES
716
FOR EACH UNRESOLVED ATTRIBUTE TYPE, CONFIRM THAT CUSTOMER HAS SELECTED ACCEPTABLE ATTRIBUTE VALUES
718
C

FIG. 3B

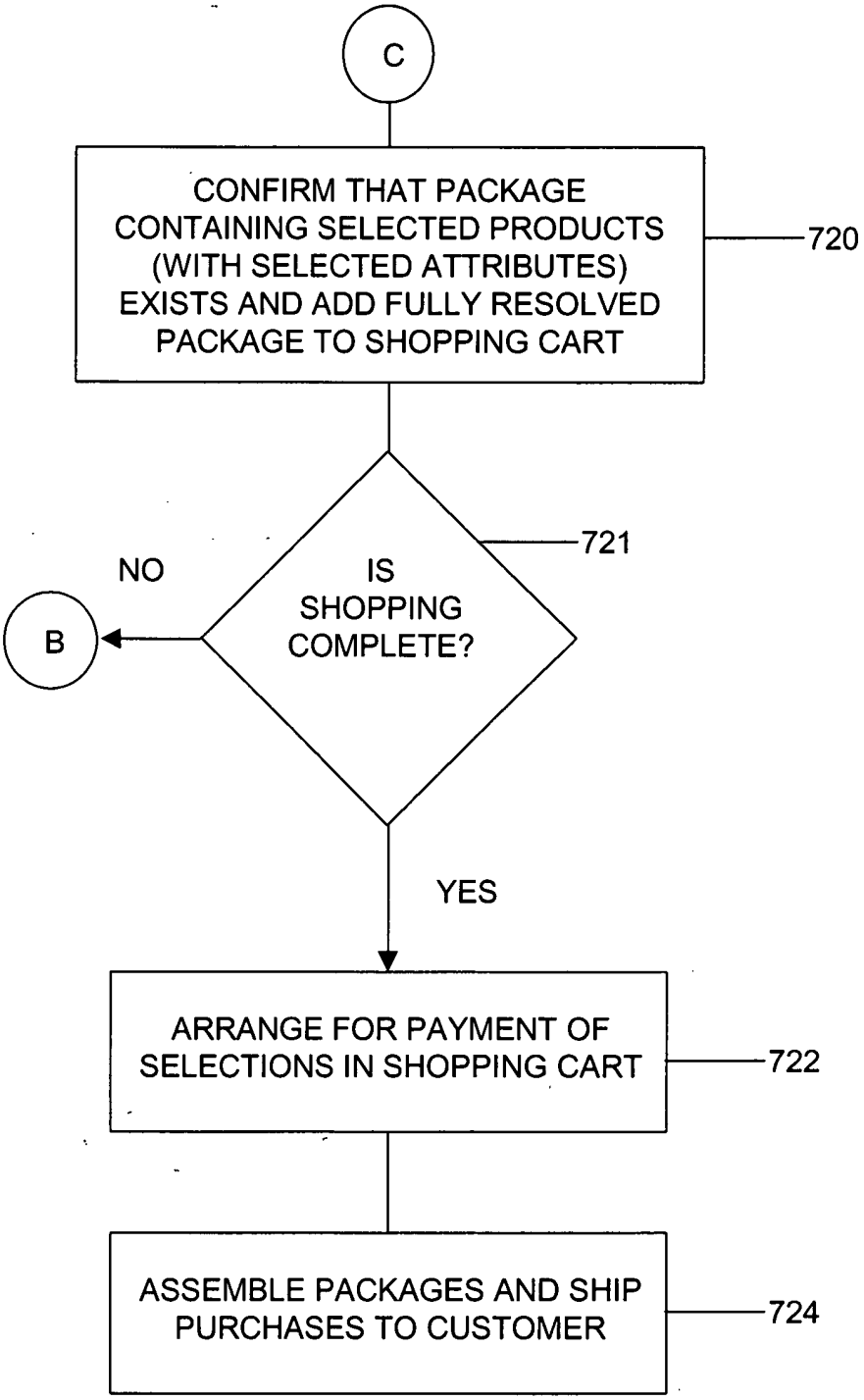

C
CONFIRM THAT PACKAGE CONTAINING SELECTED PRODUCTS (WITH SELECTED ATTRIBUTES) EXISTS AND ADD FULLY RESOLVED PACKAGE TO SHOPPING CART
720
IS SHOPPING COMPLETE?
721
NO
B
YES
ARRANGE FOR PAYMENT OF SELECTIONS IN SHOPPING CART
722
ASSEMBLE PACKAGES AND SHIP PURCHASES TO CUSTOMER
724

FIG. 3C